

DOCUMENT RESUME

ED 281 777

SE 047 971

TITLE What Do Teachers and Students Think about the Science Academy?
INSTITUTION Austin Independent School District, Tex. Office of Research and Evaluation.
REPORT NO 86.17
PUB DATE 86
NOTE 9p.; Printed on colored paper.
PUB TYPE Reports - Research/Technical (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Magnet Schools; Science Education; *Science Interests; *Science Programs; Secondary Education; *Student Attitudes; Student Characteristics; Surveys; *Teacher Attitudes
IDENTIFIERS *Science Academy TX; *Science Education Research

ABSTRACT

Science Academy students and faculty from the Austin (Texas) Independent School District were surveyed about their opinions and attitudes toward the Science Academy. This report contains a summary of their responses. Percentages are given for each of the student survey questions. Comparisons are made of the student and teacher perceptions. Survey results indicated that: (1) those students who felt inspired by their teachers also felt motivated to do their best; (2) students with low grade point averages believed that the Science Academy teachers expected too much of them whereas students with high grade point averages did not; and (3) students who felt well prepared in mathematics also believed they were well prepared in science. (ML)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED281771

WHAT Do Teachers and Students Think About The SCIENCE ACADEMY?

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

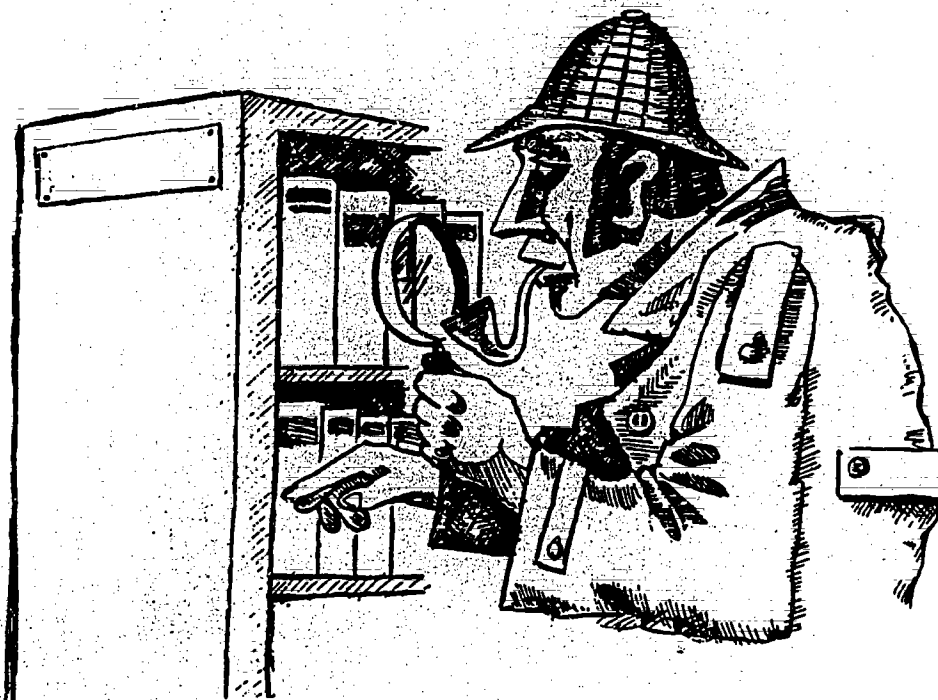
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Holley

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."



Austin Independent School District

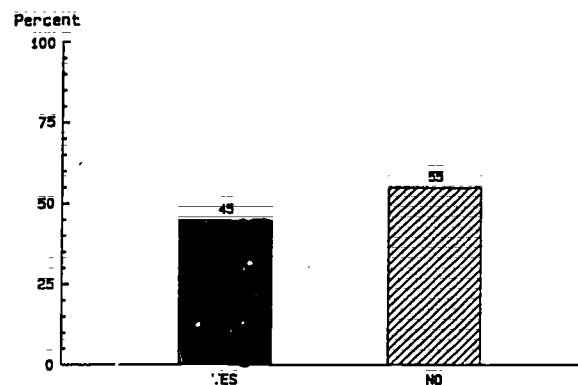
During the spring, 1986, Science Academy students and faculty were surveyed about their opinions and attitudes toward the Science Academy. Responses from 143 students and 3 teachers are summarized in this report of the survey results.

What Did Students Say About The Science Academy?

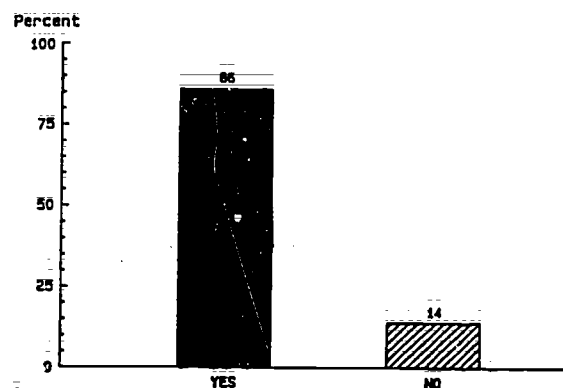
Most students reported feeling motivated by being in the Academy with other students with similar interests, and almost three quarters felt that their interests were being satisfied. That the Science Academy offered opportunities for students to pursue individual interests was also supported by numerous comments that conveyed interest in and enthusiasm for the opportunity to work with computers and advanced scientific equipment.

Many of the students would have wanted more science in junior high, and nearly half thought that a program such as the Science Academy at the junior high level would help prepare a student for the Academy. Perhaps many of the students would have been interested in a junior high science magnet themselves. Nearly all said they would encourage other interested students to apply to the Science Academy.

DID YOU HAVE ENOUGH SCIENCE
IN JUNIOR HIGH TO SATISFY
YOUR INTEREST?



I WOULD ENCOURAGE JUNIOR
HIGH STUDENTS WHO ARE
INTERESTED IN SCIENCE TO
APPLY TO THE SCIENCE ACADEMY.

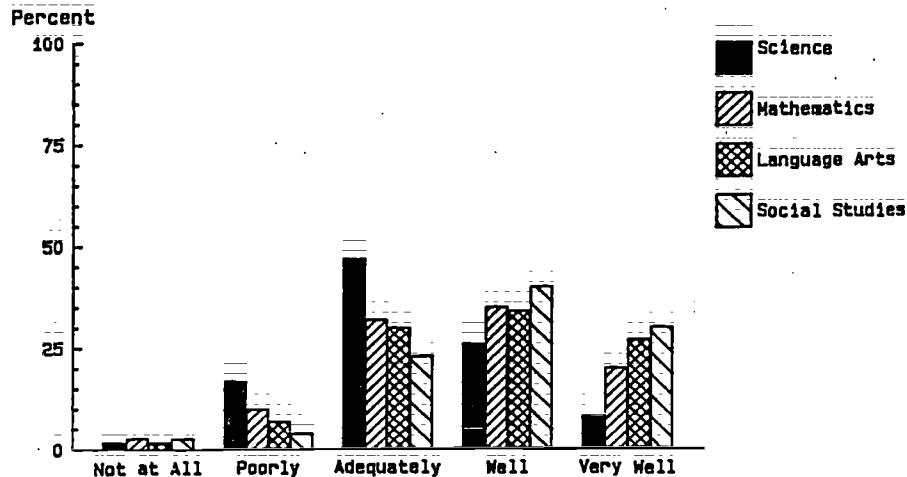


Compared to preparation in science, students consistently felt significantly better prepared in language, mathematics, and social studies. While nearly all of the students felt adequately to very well prepared in the content areas, just over two-thirds felt well prepared in study skills, and more than half expressed interest in learning how to improve their study skills and habits.

WHEN YOU ENTERED THE SCIENCE ACADEMY, HOW WELL PREPARED WERE YOU IN THE FOLLOWING AREAS?

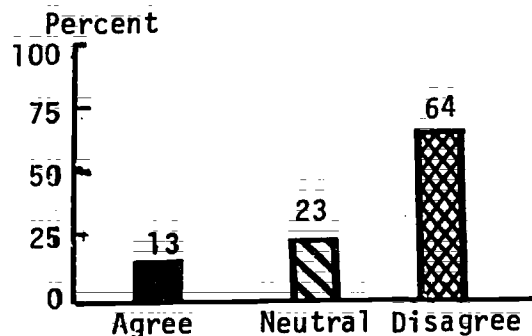
- A. Not at all prepared
B. Poorly prepared
C. Adequately prepared

- D. Well prepared
E. Very well prepared



Students also perceived distinct advantages to being in the Science Academy, such as helping them get into a good university and being sure of their plans to enter careers related to a scientific field of study. However, students were divided on whether they thought the Science Academy would provide them with more immediate benefits, like improving performance on standardized tests.

The concern that the students would have difficulty being accepted by the regular student body at LBJ High School did not develop into a major issue. The majority reported that they were not hassled by other students, and only a few said they were hassled at times.



**OTHER STUDENTS HASSLE ME
BECAUSE I AM IN THE
SCIENCE ACADEMY.**

DATA

The following scale was used by students to respond to the following survey questions:

A. Strongly Agree B. Agree C. Neutral D. Disagree E. Strongly Disagree

| | A | B | C | D | E |
|---|-----------|-----------|-----------|-----------|-----------|
| BEING WITH OTHER SCIENCE ACADEMY STUDENTS WHO HAVE INTERESTS SIMILAR TO MINE MOTIVATES ME TO LEARN. | 13 9% | 62 43% | 51 36% | 10 7% | 7 5% |
| THE SCIENCE ACADEMY PROVIDES AN OPPORTUNITY TO STUDY TOPICS THAT INTEREST ME. | 31 22% | 70 49% | 27 19% | 9 6% | 5 4% |
| THE SCIENCE ACADEMY TEACHERS INSPIRE ME TO LEARN. | 14 10% | 41 29% | 60 42% | 9 13% | 5 6% |
| THE SCIENCE ACADEMY TEACHERS EXPECT TOO MUCH FROM ME. | 14 10% | 41 29% | 60 42% | 18 13% | 9 6% |
| I THINK MY REGULAR CLASS TEACHERS EXPECT A LOT FROM ME JUST BECAUSE I AM IN THE SCIENCE ACADEMY. | 15 10% | 37 26% | 28 20% | 35 25% | 27 19% |
| MY STUDY HABITS ARE NOT AS GOOD AS THEY SHOULD BE. | 27 19% | 50 35% | 34 24% | 18 12% | 14 10% |
| I WOULD LIKE TO LEARN HOW TO IMPROVE MY STUDY SKILLS. | 34 24% | 45 32% | 46 32% | 6 4% | 11 8% |

BANK

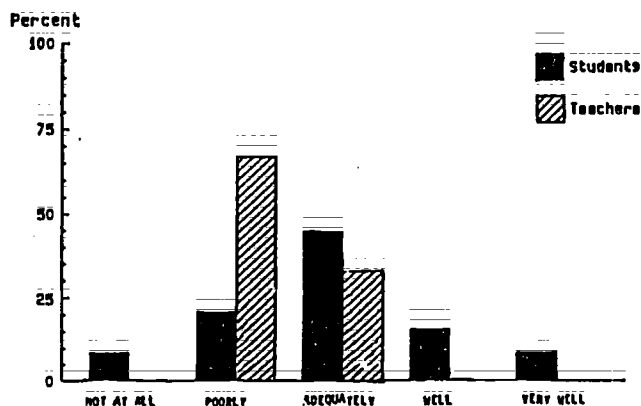
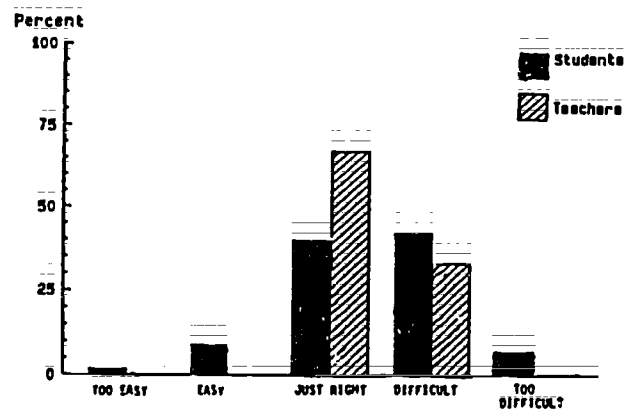
A. Strongly Agree B. Agree C. Neutral D. Disagree E. Strongly Disagree

| | A | B | C | D | E |
|--|-----------|-----------|-----------|------------|-----------|
| I LEARN A LOT FROM USING THE COMPUTERS AND SCIENCE EQUIPMENT. | 24 17% | 58 42% | 33 24% | 10 7% | 14 10% |
| WHAT I LEARNED IN JUNIOR HIGH SCIENCE IS USEFUL NOW IN WHAT I'M STUDYING IN THE SCIENCE ACADEMY. | 15 10% | 47 33% | 31 22% | 16 17% | 26 18% |
| BEING IN THE SCIENCE ACADEMY WILL PROBABLY HELP A STUDENT GET INTO A GOOD UNIVERSITY. | 51 36% | 65 45% | 17 12% | 3 2% | 7 5% |
| A JUNIOR HIGH SCIENCE ACADEMY WOULD HELP PREPARE STUDENTS FOR THE HIGH SCHOOL SCIENCE ACADEMY. | 25 18% | 39 28% | 35 25% | 24 17% | 16 12% |
| I WOULD CONSIDER PURSUING A CAREER IN SCIENCE, MATH, OR TECHNOLOGY. | 65 45% | 48 34% | 19 13% | 4 3% | 7 5% |
| WHAT DO YOU PLAN TO DO AFTER YOU GRADUATE FROM HIGH SCHOOL? | 6 4% | 0 0% | 3 2% | 111 78% | 22 16% |
| A. Find a science, math, or technology related job. | | | | | |
| B. Find any kind of job. | | | | | |
| C. Go to a community college. | | | | | |
| D. Go to a university. | | | | | |
| E. I don't know yet. | | | | | |

How Did Students and Teachers Compare?

Do students and teachers view the difficulty of the Science Academy curriculum differently?

YES! Students tended to think it was more difficult than teachers, who were more likely to think that the difficulty level was just right.

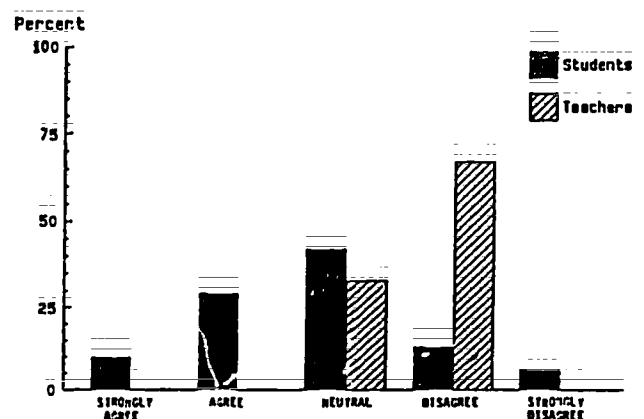


How well prepared are students in study skills?

Teachers thought that students were poorly prepared in study skills, and all agreed that skills needed improvement. More than two-thirds of the students thought they were adequately to very well prepared in study skills; however, more than half agreed they wanted to learn how to improve their skills.

Do the Science Academy teachers expect too much of the students?

It depends on who you ask. None of the teachers thought that their expectations were too high. Most students were neutral, but more students agreed than disagreed that teachers' expectations were too high.



What Else Was Learned?

In addition to the responses presented in the preceeding sections, the following results were found by statistically correlating items with other items or with students' grade point averages (GPA) at the end of the fifth six-week grading period in 1986.

- Those students who felt inspired by their teachers also felt motivated to do their best.
- Students who thought that courses were difficult tended to believe that the teachers expected too much from them. The converse was also true. Those who thought courses were easy thought that teachers did not expect too much from students.
- Feeling prepared in study skills was related to feeling prepared in the content areas--the better the study skills, the better prepared a student felt in science, language arts, mathematics, or social studies. Also, feeling well prepared in mathematics meant feeling prepared in science.
- Ninth- and tenth-grade students with low GPAs believed that the Science Academy teachers expected too much of them; students with high GPAs did not feel this way.
- Ninth-grade students with low GPAs said they wanted to improve their study skills, and low-GPA tenth graders tended to feel unprepared in study skills.

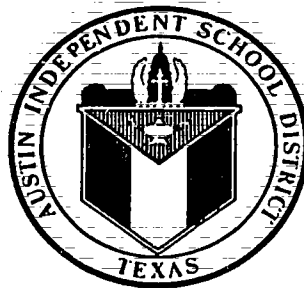
AUSTIN INDEPENDENT SCHOOL DISTRICT
DEPARTMENT OF MANAGEMENT INFORMATION

Dr. Glynn Ligon, Director

OFFICE OF RESEARCH AND EVALUATION
Dr. David A. Doss, Assistant Director

Margie Gaines, Evaluator

Terra Robinson, Secretary



BOARD OF TRUSTEES

Nan Clayton, President

Bernice Hart, Vice President

Lidia M. Perez, Secretary

John Lay
Dr. Gary R. McKenzie

Abel R. Ruiz
Ed Small

SUPERINTENDENT OF SCHOOLS

Dr. John Ellis

Publication Number 86.17